

# SURGICAL RETRIEVAL OF RARE GASTRIC FOREIGN BODY IN A DOG

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An eight month-old intact male Pitbull dog weighing 22 kg was presented with the history of ingestion of shuttle cock yesterday night accidentally. Clinically, animal was dull and depressed. On abdominal palpation, no palpable foreign material noticed. Plain radiograph of abdomen in lateral view revealed radio-opaque structure almost in the shape of shuttle cock noticed at the pyloric region of the stomach. On explorative gastrotomy, shuttle cock and tablet wrapper cover were recovered. Post operatively, pet recovered uneventfully.

**Keywords:** Gastrotomy, Pitbull dog, Shuttle cock, Tablet wrapper cover.

Canines are more prone to gastric foreign body syndrome because of their voracious, indiscriminate and gulping nature of feeding habits. A gastric foreign body is defined as anything ingested by dog that cannot be digested (i.e., rocks, plastics, toys, leashes, balls, cloths, sticks) or that is slowly digested (bones) or that will not readily pass through the gastrointestinal tract (Fossum, 2007). In most cases, it causes direct physical trauma to the gastric mucosa which leads to gastric ulcers, gastritis and obstruction (Kader and Farghaki, 2015). The most common clinical signs are persistent vomiting, partial to complete anorexia, weight loss and lethargy (Uma Rani *et al.*, 2010). A gastrotomy is mostly performed in dogs and cats for retrieval of a foreign body lodged in the stomach or to release a linear foreign body anchored in the pylorus (Monnet, 2020). The present case report describes about the successful surgical management of a rare gastric foreign bodies by gastrotomy in a Pitbull dog.

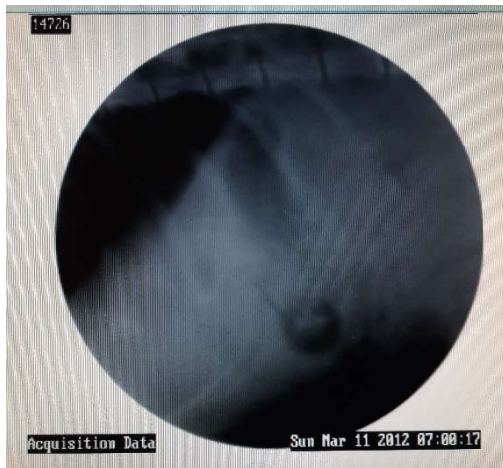
## Materials and Methods

A 8-month-old intact male Pitbull dog weighing 22 kg was presented to the department of Veterinary Surgery and

Radiology, Veterinary College, Bengaluru with the history of that pet has eaten shuttle cock yesterday night accidentally. Clinically, animal was dull and depressed. On abdominal palpation, no palpable foreign material noticed. Plain radiography of abdomen in lateral view revealed radio-opaque structure almost in the shape of shuttle cock at the pylorus region of the stomach (Fig. 1). Complete blood count and serum biochemical profiles were within the normal physiological range. The present case was diagnosed as gastric foreign body and decided for gastrotomy.

Food and water were withheld 12 hours and 6 hours before the surgery. Animal was premedicated with Atropine @ 0.04 mg/kg B.W. intramuscularly after a gap of 5 minutes sedated with Inj. Xylazine @ 1 mg/kg B.W. and After 10 minutes, animal was anaesthetized with Inj. Thiopentone sodium @ 12.5 mg/kg B.W. till the effect. Animal was placed on dorsal recumbency and the surgical site (cranial ventral abdomen) cleaned with savlon and shaved then cleaned with the surgical spirit, painted with 7.5% povidone iodine solution and the site prepared aseptically. Linear skin incision was given from the post-xiphoid to umbilicus. Linea

alba was incised and entered the abdominal

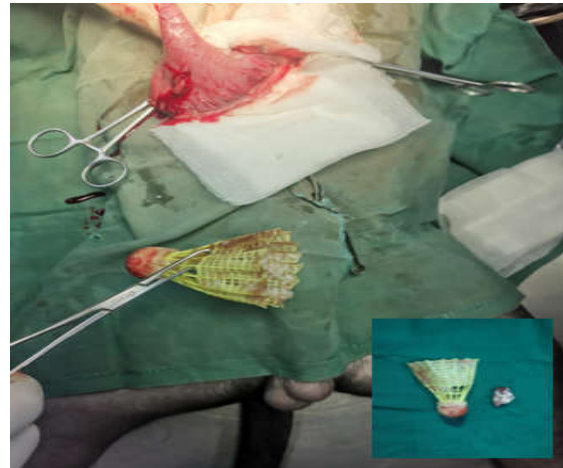


**Fig. 1. C ARM image showing radiopaque structure at the pylorus region of the stomach.**

Stomach was exteriorized through the surgical site. Gastric foreign body was located and positioned against the stomach wall. The laparotomy incision was packed with sterile mops in order to avoid spillage of gastric contents into the abdomen cavity. Linear incision was made on the less vascular part of the stomach, in between the greater and lesser curvature. The gastric foreign bodies (Shuttle cock and tablet wrapper cover) were removed (Fig. 2). The stomach wall was closed by double layer of Cushing's suture pattern using Chromic Catgut no. 2-0. Stomach wall washed and abdominal cavity was lavaged with warm normal saline followed by Metronidazole solution. Abdominal muscles were closed by simple interrupted suture pattern using Polyglactin 910 No. 1 suture material. Subcutaneous tissue opposed by simple continuous pattern using Polyglactin 910 no. 1 and the skin was closed by horizontal mattress using Polyamide no. 1-0 sutures. The surgical site was dressed and bandaged.

The pet recovered from anaesthesia uneventfully (Fig. 4). Complete withhold of food and water was done for 3 days and the pet was kept on drips (inf. DNS 400 mL, inf. RL 400 mL, inf. Metronidazole 65 mL) and

cavity.



**Fig. 2. Photograph showing the shuttle cock and tablet wrapper cover retrieved by gastrotomy**

inj. Ceftriaxone 550 mg BID for 3 days inj. Pantoprazole 22 mg and inj. B-complex 1 mL SID for 3 days. After 3 days, pet was fed with liquid diet for 2 days, followed by semisolid food and solid food after 7 days. Wound dressing done once in every 2 days intervals, and suture removal was done on 10<sup>th</sup> post-operative day.

### **Results and Discussion**

The pet recovered uneventfully. The ingestion of foreign bodies is common in dogs. In our case study, we used radiography as diagnostic tool for the diagnosis of gastric foreign body. Gastrotomy is most oftenly indicated for treatment of stomach problems including removal of foreign objects and stomach tumours and has a favourable prognosis as also reported by Sharma *et al.*, (2017). In our case, we performed gastrotomy based on history of ingestion of shuttle cock and radiological findings and removed complete shuttle cock and tablets wrapper cover as the gastric foreign bodies. Similar finding was recorded by Bharathidasan *et al.* (2019) who also observed shuttle cock as gastric foreign body. Hypochloremic, hypokalemic metabolic alkalosis was seen with both proximal and

distal gastrointestinal foreign bodies. In order to overcome the electrolyte imbalance, fluid therapy with ringers lactate was performed.

### Conclusions

Apomorphine and Ropinirole can be used for the expulsion of the non-potential foreign bodies of smaller size and if the gastric foreign bodies are of bigger size and having potential of causing damage to the surrounding tissue, gastrotomy is the better option. In the present case, a successful surgical retrieval of shuttle cock and tablet wrapper cover had been recorded.

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